

Tentative Outline

Special Thematic Issue for the journal

Current Neuropharmacology

Title of the Thematic Issue: Modification of Biomacromolecules in Neuropathology

Guest Editors: Chun-tao Yang

• Aims and Scope:

Modification following transcription or translation is a key step to regulate gene expression efficiency. However, the modification is usually found to be disrupted in neuropathology. Investigating roles triggered by the abnormal modification will contribute to understanding the significance of indicated genes, which will help to find potential therapeutic targets. In recent years, some novel modifications have successively been identified and their diagnostic and therapeutic importance was demonstrated in neuropharmacology. Therefore, the overall evaluation of these modifications is of great significance to both neurodegenerative diseases and acute neural lesions. Additionally, the present applications of some inhibitors of traditional post-translation will be reviewed.

This thematic issue aims to introduce the significance of abnormal modification, detection methods, and diagnostic value, and to provide clues for prodrug design.

Keywords: Post-translation, RNA methylation, Neurodegeneration, Spinal cord injury, Neuropathic pain

Sub-topics:

The subtopics include but not limited to the following:

- Homocysteinylation in neurodegenerative diseases
- Post-translational modifications of BACE1 in Alzheimer's disease
- Effects of α -synuclein-associated post-translational modifications in Parkinson's disease
- Post-translational modification after spinal cord injury
- Effect of histone modification of monoamine oxidases in major depressive disorders
- Neuroprotection of dexmedetomidine via m⁶A methylation
- HDAC: A promising therapeutic target in neurological disease
- Similarities and characteristics of epigenetic mechanism in neuropathic pain induced by different chemotherapy drugs

Tentative titles of the articles and list of contributors:

- [Homocysteinylation in neurodegenerative diseases](#)

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- [Post-translational modifications of BACE1 in Alzheimer's disease](#)

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- [Effects of \$\alpha\$ -synuclein-associated post-translational modifications in Parkinson's disease](#)

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➤ [Post-translational modification after spinal cord injury](#)

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➤ [Effect of histone modification of monoamine oxidases in major depressive disorders](#)

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➤ [Neuroprotection of dexmedetomidine via m⁶A methylation](#)

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➤ [HDAC: A promising therapeutic target in neurological disease](#)

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➤ [Similarities and characteristics of epigenetic mechanism in neuropathic pain induced by different chemotherapy drugs](#)

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Schedule:

✧ Thematic issue submission deadline:

February 28th 2021

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